iVMS-2000

POS

Application Guide

V2.0.0

Hangzhou Hikvision Digital Technology Co., Ltd.

Thank you for purchasing our product. If there is any question or request, please feel free to contact us.

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This manual may contain several technically incorrect places or printing errors, and the content is subject to change without notice. The updates will be added into the new version of this manual, and we will readily improve or update the product or procedure described in the manual.

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1 Brief Description of POS Application

iVMS-2000 POS Application is part of iVMS-2000 system to support POS surveillance solution. Construction of iVMS-2000 POS application is: each POS machine is connected with a printer via serial port (RS232), and the POS transaction data is transmitted to iVMS-2000 via COM port or network connection. For network POS data transmission, users need to connect a serial port server to transfer the serial port data into network data and sends it to iVMS-2000.

Terms Description

Item	Description
POS Rule	Rules configured by users to filter the original POS transaction data
Original Data	Data send by the POS
Filtrated Data	Data filtered by POS rules, which will be the final content displayed on video images

1.1 Hardware Configuration

POS transaction data is send to iVMS-2000 via either serial port or network transmission.

1. Serial Port Connection

   Connect POS and PC directly with serial port (RS232) cable (Figure 1-1).

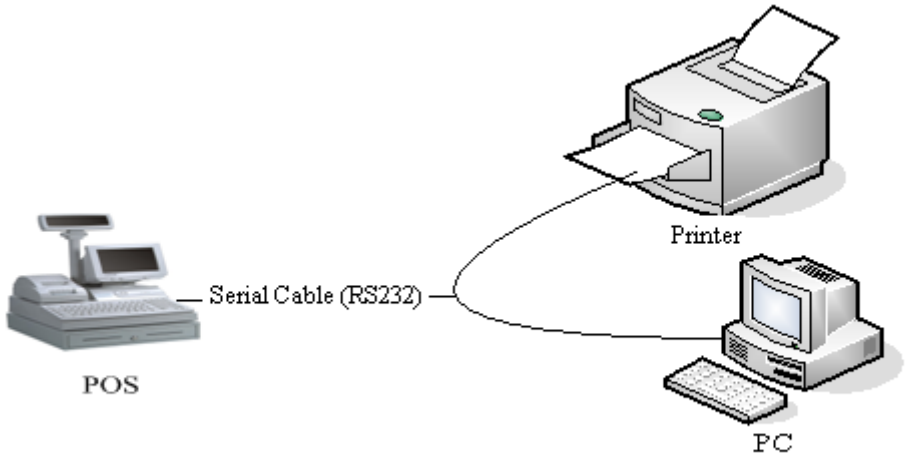

Figure 1-1 Serial Port Connection

Please refer to the following steps for connection between POS, Printer and PC:

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Step 1: connect the POS with root end of a Y-branch RS232 cable.

Step 2: Connect the 2 branches of the Y-branch RS232 cable to the printer and the PC that installed iVMS-2000.

2. Network Connection

The IO Server can transfer the serial port data sent by POS into network data, and it is connected with POS via serial cable (Figure 1-2).

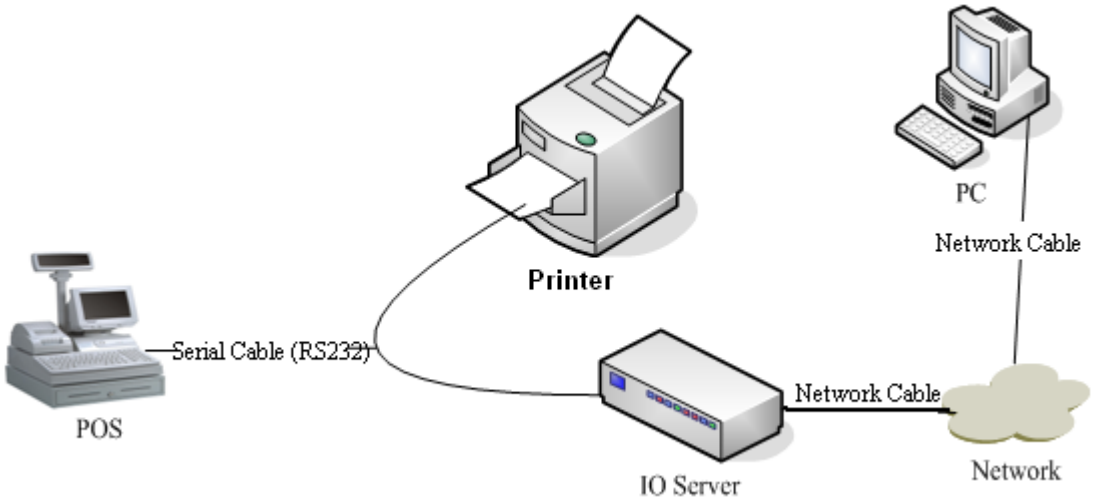

Figure 1-2 Network Connection

Please refer to the following steps for connection between POS, Printer, IO Server and PC:

Step1: Step 1: connect the POS with root end of a Y-branch RS232 cable.

Step 2: Step 2: Connect the 2 branches of the Y-branch RS232 cable to the printer and the IO Server.

Step 3: Power on the IO Server.

Step 4: Connect the IO Server to the network (Figure 1-3).

Figure 1.3 NC601B

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1.2 Software Configuration

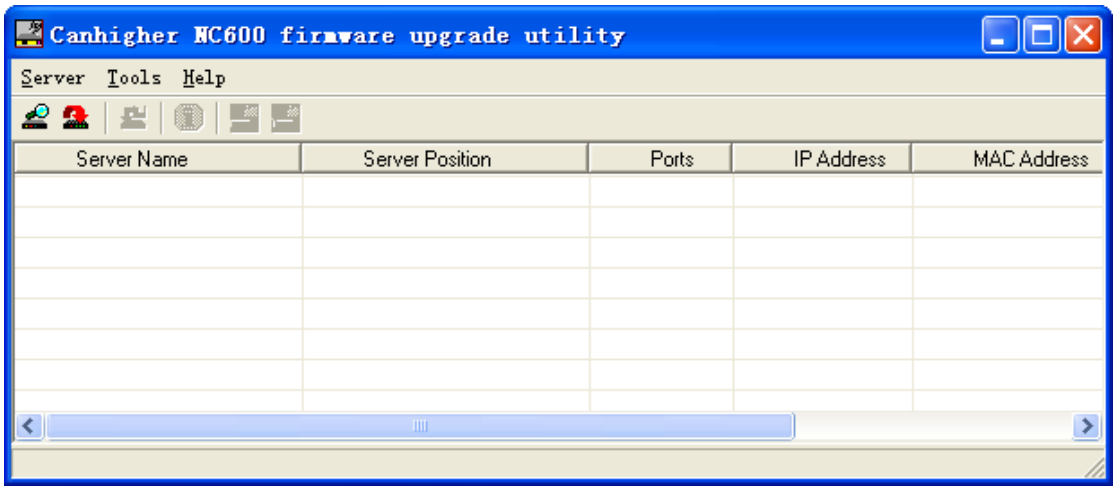
The following content mainly describes the software Configuration for IO Server.

First of all, please make sure that the IO Server and the PC are both connected into the same network.

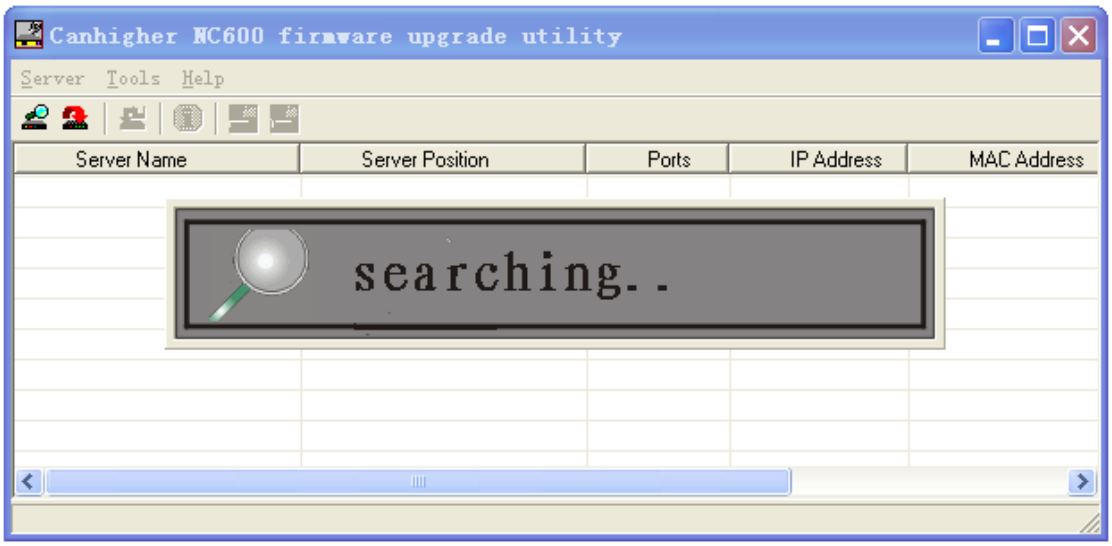
1. Modify the IP of IO Server

If the IP addresses of IO Server and PC are not in the same network section, users need to update the IO Server's IP as the following configuration steps:

Step 1: Double click the Upgrade.exe in the software CD, the software window will popup as below:



Step 2: Click the Magnifier icon on the tool bar and enter the searching window as below:



If the POS server is connected correctly, a software window will be displayed as below:

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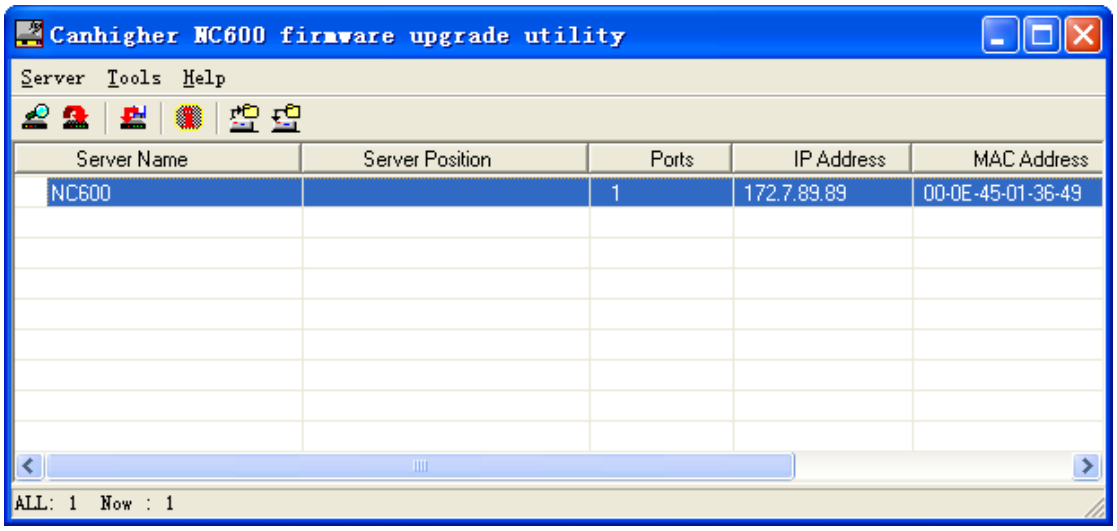
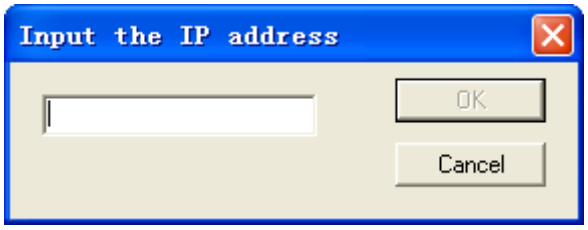
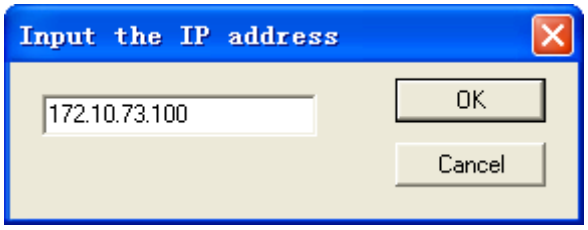


Step 3: Click [Tools] and select [Temporary change IP address]:



Step4: Input IP address for POS, please notice that the POS server's IP should be in the same segment as the PC.



Step 5: Click [OK]

Step 6: Click [OK]

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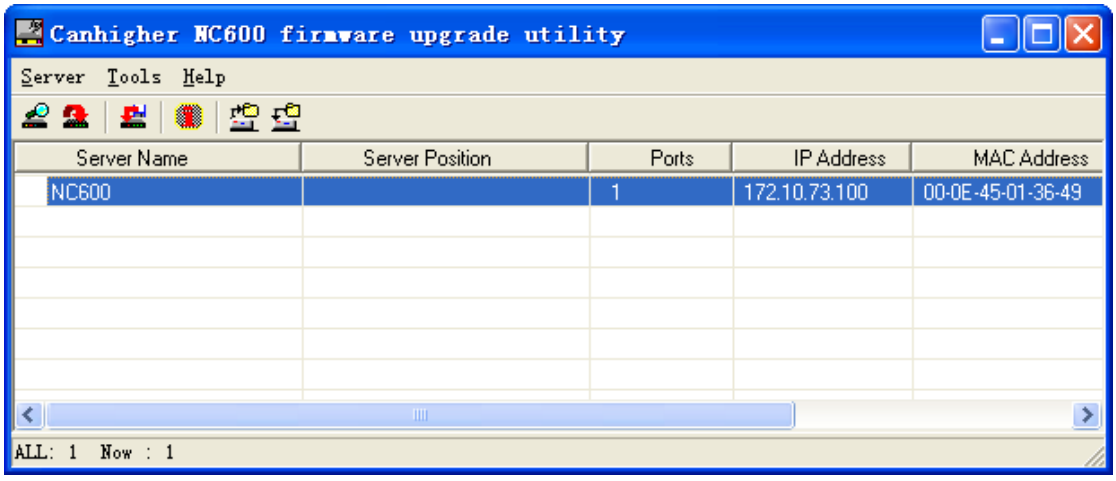
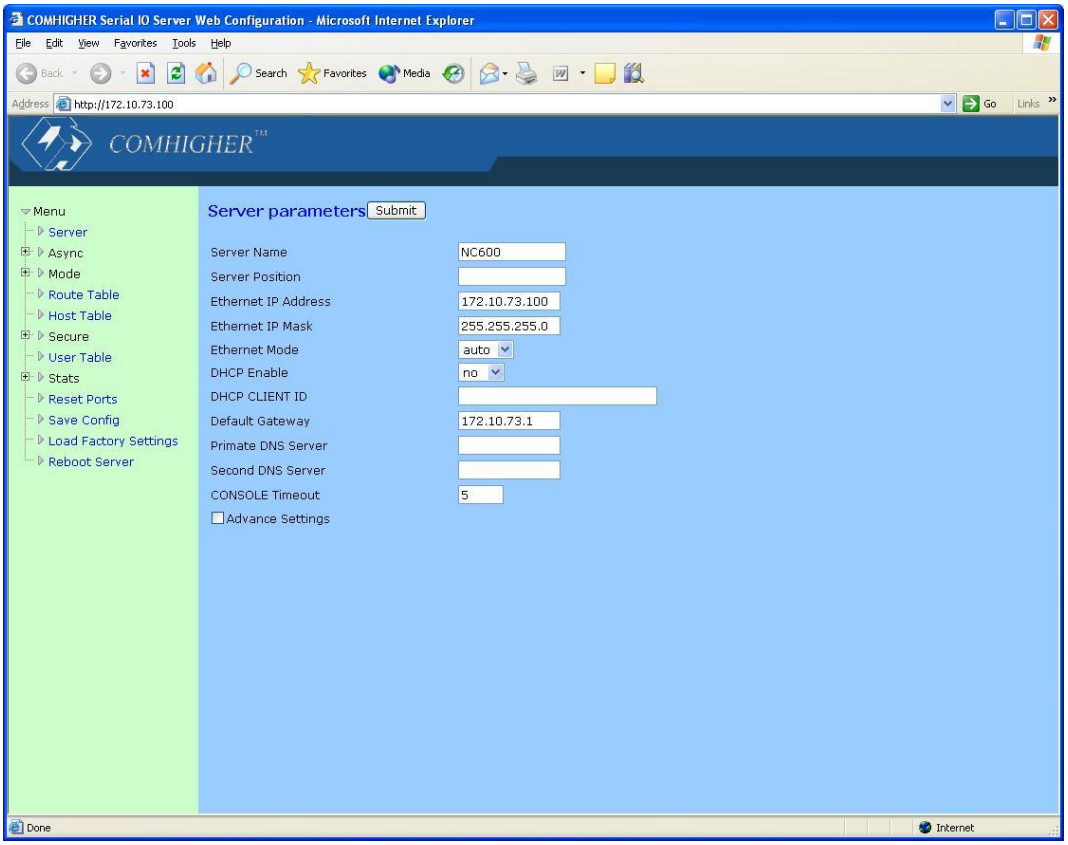


2. Configure POS Server

Please follow the operation steps below for POS server configuration.

Step 1: Input POS server's IP in the address bar of IE browser, and click [Go];

Step 2: Click [Server] in the list on the left side, and configure POS server's IP address, subnet mask and default gateway, etc. Click [OK] after all the configuration steps are done.



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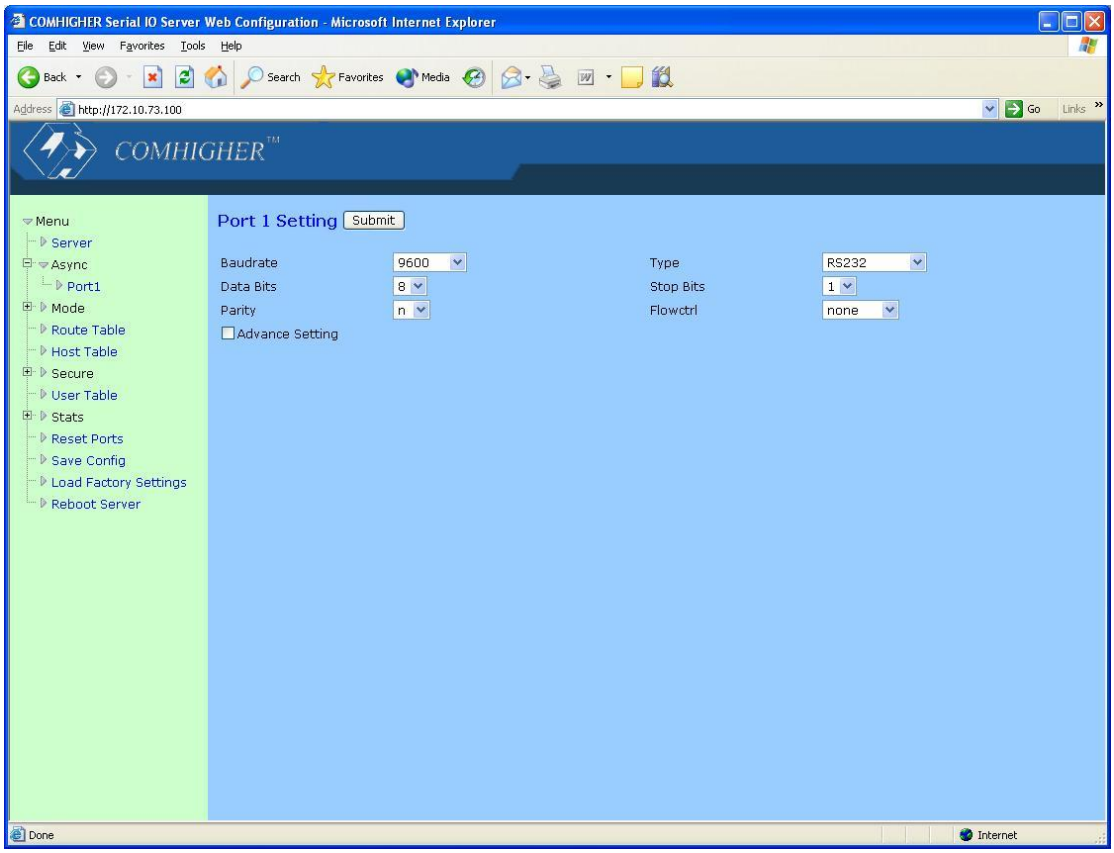
Step 3: Click [Serial Port Configuration] to configure serial port parameters. Select ‘RS232’ as [Type], and click [OK] after all the configuration steps are done.



Step 4 : Click [Work Mode] to configure the working mode of POS server. Select ‘TCP/UDP Socket’ for [Work Mode] option and ‘TCP Server’ for dialog 1. Click [OK] after all the configuration steps are done.

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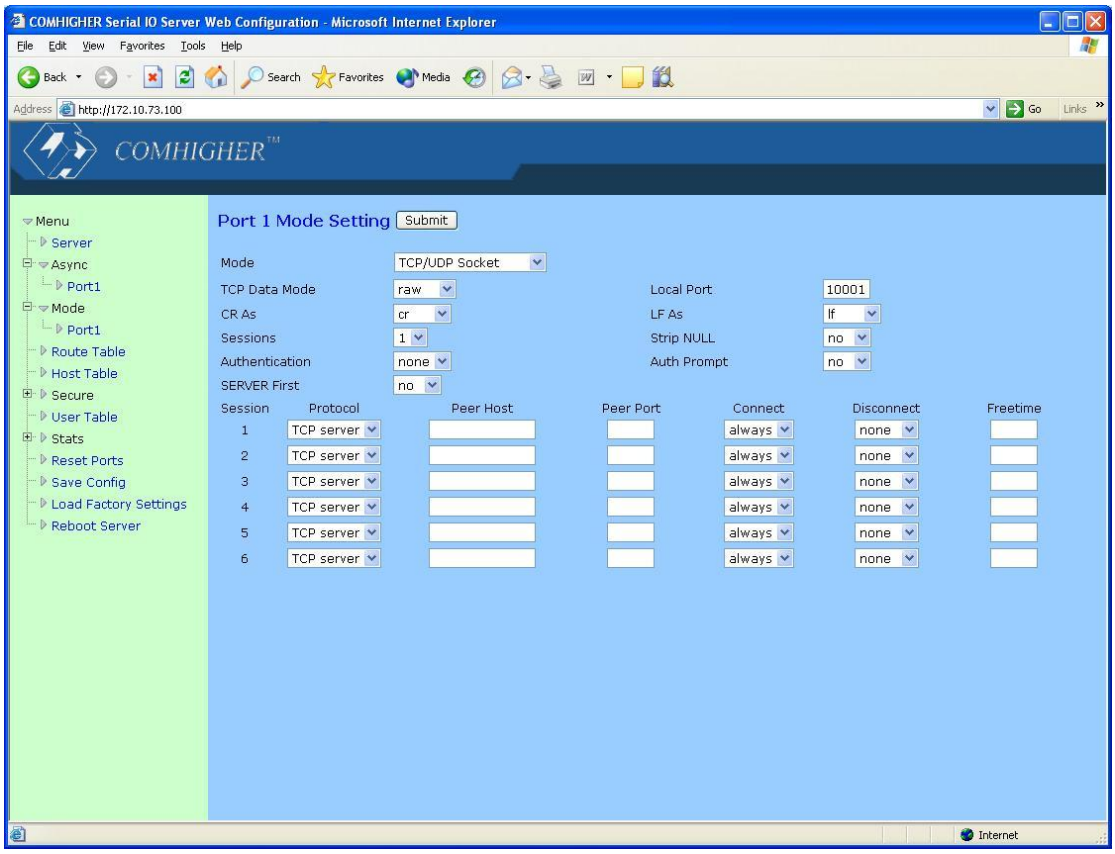
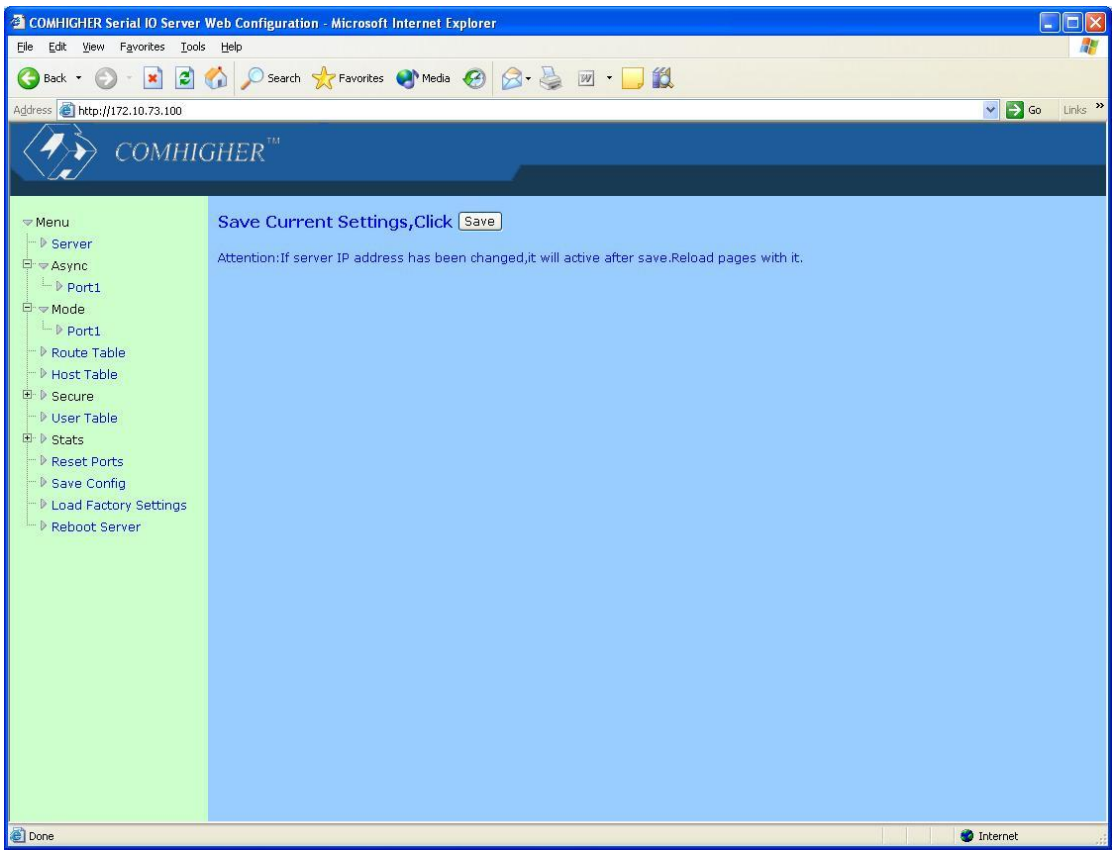


Step 5: Click [Save] in the list after all the configuration steps are done as the figure below.



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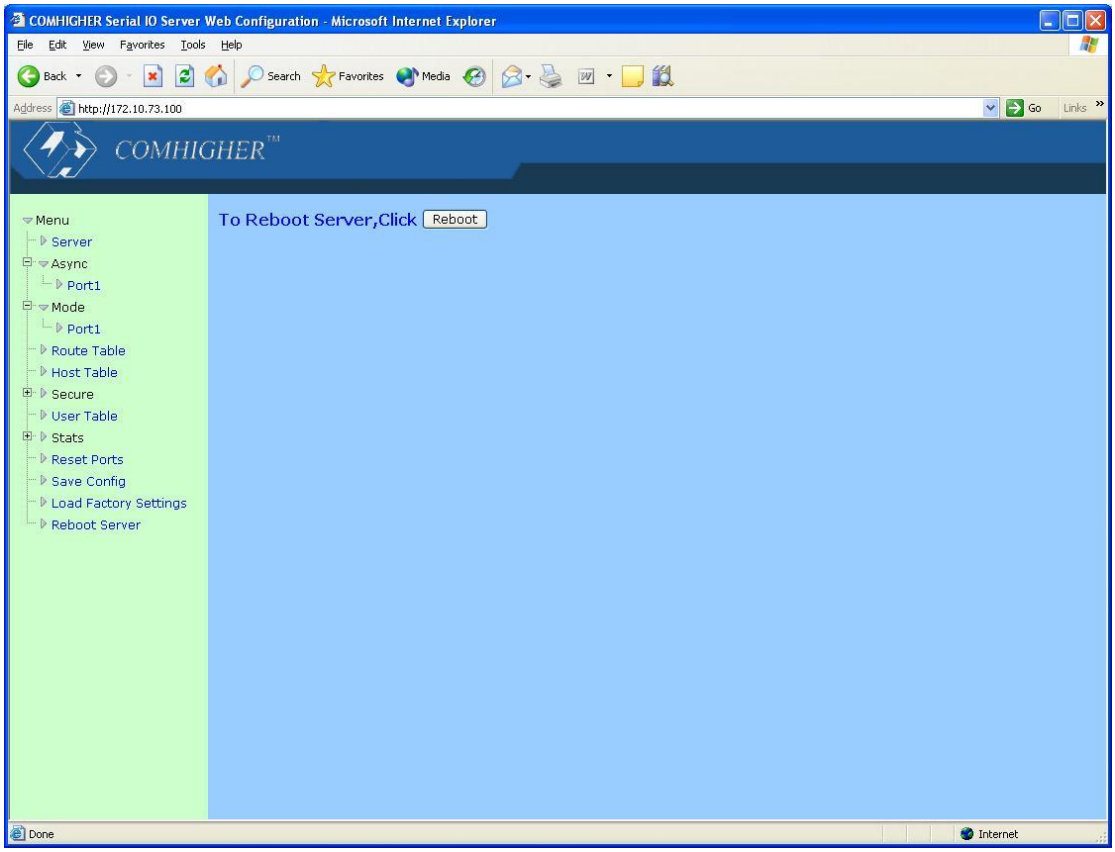
Step 6: Click [Reboot Device] in the list and then click [Reboot].



The above content describes basic configuration steps for POS server. For more detail configuration description, please kindly refer to the user manual of POS server.

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2 POS Configuration

2.1 POS Management

iVMS-2000 system supports up to 16 POS server connection at the same time, and each POS server can be linked with several cameras. Please refer to the below content for POS configuration steps in iVMS-2000 software.

Enter iVMS-2000 main interface, click [Application] and then select [POS Function] to view the POS application window. Click [POS Management] to enter POS management interface (Figure 2-1).

Users can add/modify/delete POS server in this POS management window, and can check or modify POS server status by double-clicking on the POS server list.

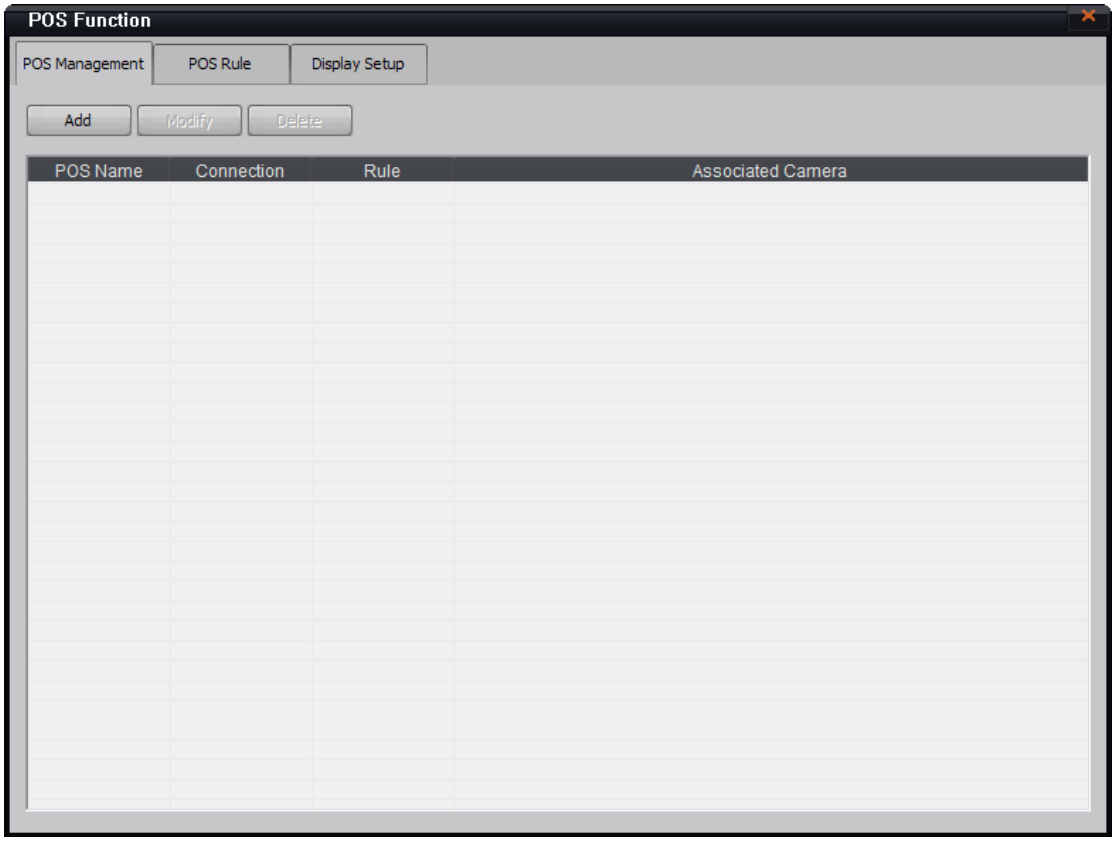

Figure 2-1 POS Management

(1) Add POS

POS server can be added via serial server mode (Figure 2-2) or COM port connection mode (Figure 2-3).

1. Click [Add] and open the Add POS window;
2. Input POS server name and other parameters. For the network connection mode, users need to configure [Serial Server], [IP address] and [Port]; and for the COM port connection mode,

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users need to select COM port number and then setup COM port parameters.

3. After all the above configuration steps are done, click [Start Test] to start POS function testing (remark: users need to select a camera channel from the camera list for POS data viewing);
4. Select filtration rules for POS data (POS rule configuration is described in the following chapter);

   If users have not created any POS rules, please click [New] to add filtration rule for POS server. Please refer to Chapter 2.2 'POS Rule'.
5. POS data display and delay interval configuration :

   If the POS data can not been displayed completely in the configured display region (Figure 4.3: display region configuration), then the POS data will be displayed in paging mode.

   Display POS data: the selected POS data will be displayed on the selected camera image.

   Delay: the POS display delay interval ranges from 1 second to 10 seconds, i.e. 3 seconds' delay stands for the display duration for each page of POS data is 3 seconds.
6. Select the linked camera.
7. Click [OK] to save the POS management configuration, and then there will be a POS server added and displayed on the POS management list.

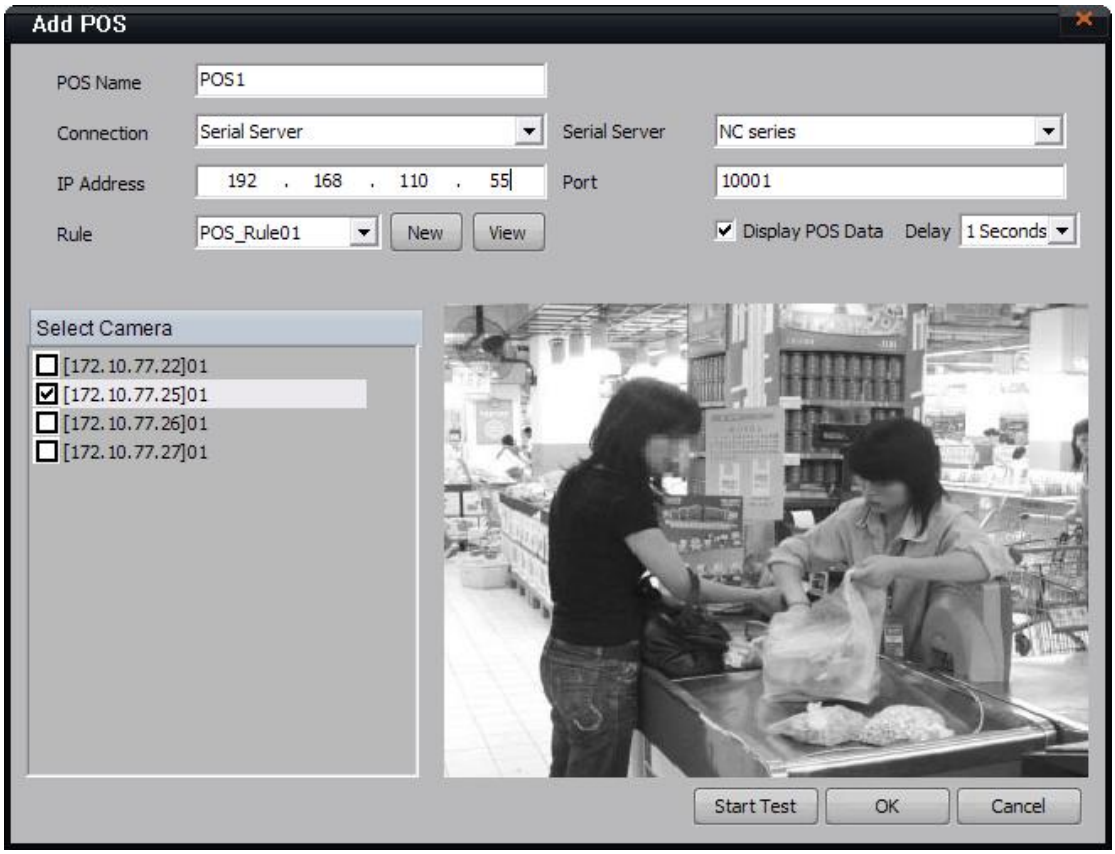

Figure 2-2 Add POS (Serial Server Connection Mode)

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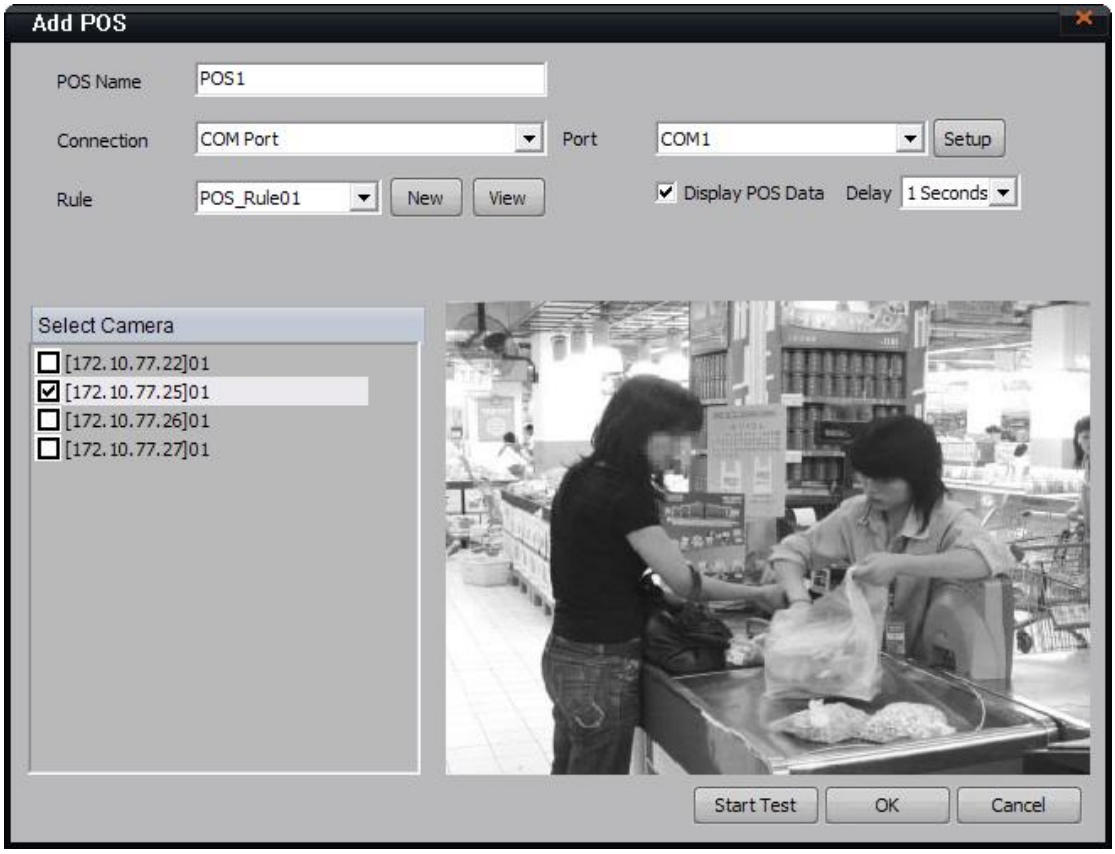

Figure 2-3 Add POS (COM Port Connection Mode)

(2) Modify POS

1. Double click the POS information on the list, or select the POS information from the list and click [Modify]. (Figure 2-1)
2. Modify the POS server configuration. The configuration steps are similar as 'Add POS Server' steps.

(3) Delete POS

1. Select POS from the list and click [Delete], and there will be a message box popup on screen (Figure 2-4);
2. Click [OK] to delete the POS server or click [Cancel] to cancel this operation.

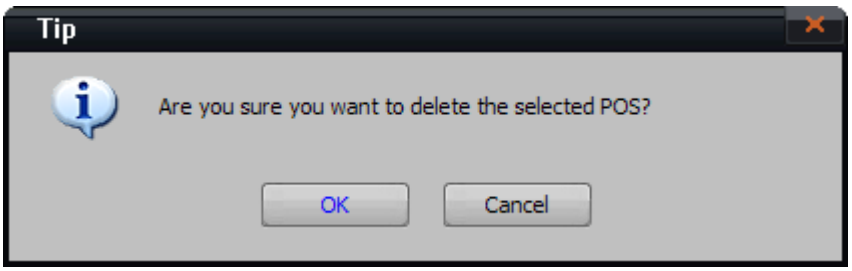

Figure 2-4 Delete POS

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2.2 POS Rule

iVMS-2000 supports up to 16 POS rules, and POS rule configuration is described below.

Enter iVMS-2000 main interface, click [Application] and then select [POS Function] to view the POS application window. Click [POS Rule] to enter POS rule configuration interface (Figure 2-5).

Users can add/modify/delete POS rules in this POS rule configuration window, and can check or modify POS rules by double-clicking on the POS rule list.

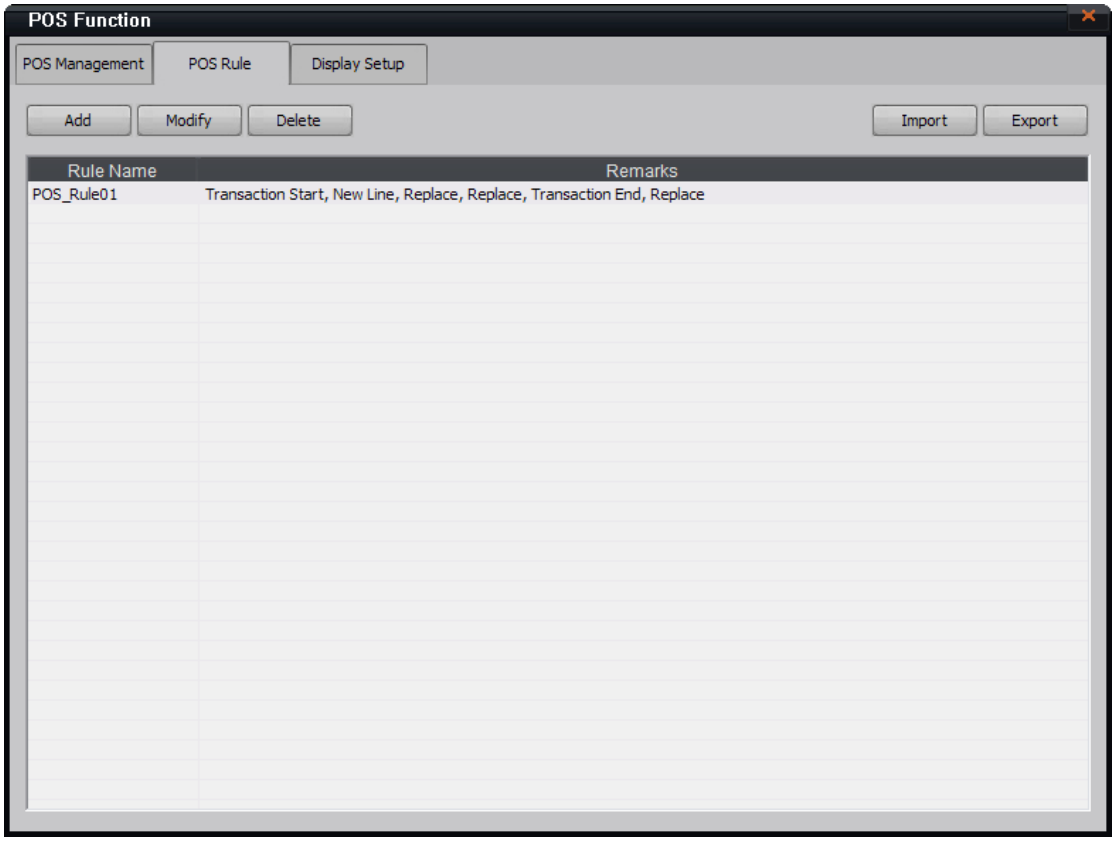

Figure 2-5 POS Rule Configuration

(1) Add a POS Rule

1. Click [Add] to open the Add POS Rule window (Figure 2-6).

Name	Description
Rule Name	Set POS rule name
Select POS	Select a POS device to get POS data
Get Data	Display the original transaction data send by the POS
Filtrated Data	Display filtrated POS data
Rule	Click the relative buttons to set POS filtration rules

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Contents	Display the POS rules which has already been configured

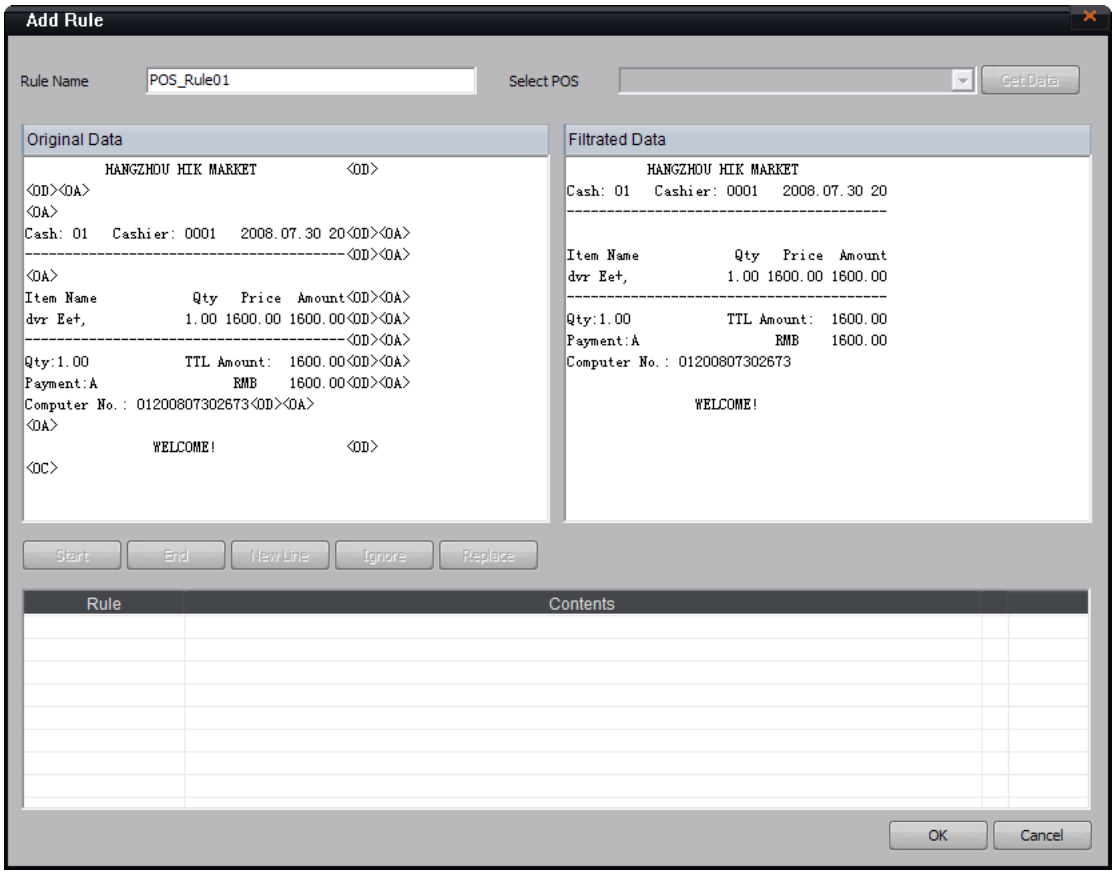


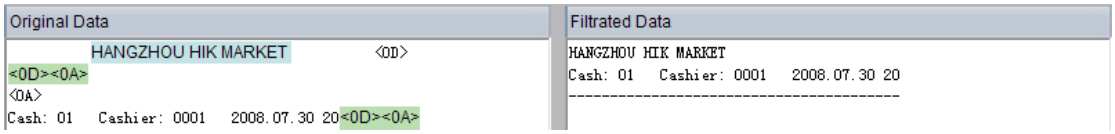
Figure 2-6 Add POS Rule

2. Input POS rule name
3. Select a POS server and click [Get Data] to get its original transaction data
4. Operate the POS to send transaction data
5. Set POS rules according to the original data send by the POS (Remark: the 'Start' and 'End' rules is required to be configured)

Click the Original Data Window and select the test content, and then select between the 5 buttons below to set different POS data filtration rules. The filtrated data will be displayed inside the window on the right side.

- **Start:** The selected text will be set as mark of each POS transaction start, and all the data between POS transaction start and the previous POS transaction end will be cleared.

i.e. Select 'HANGZHOU HIK MARKET' as transaction start rule



- **End:** The selected text will be set as mark of each POS transaction end, and all the data between POS transaction end and the next POS transaction start will be cleared.

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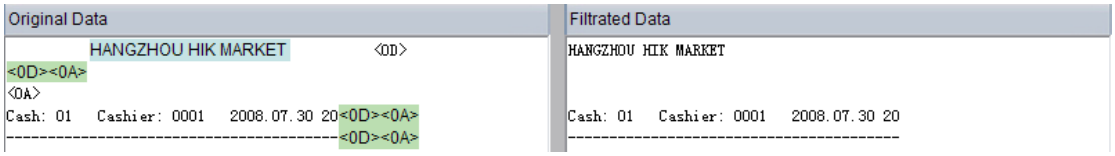
i.e.: Select 'WELCOME!' as transaction end rule

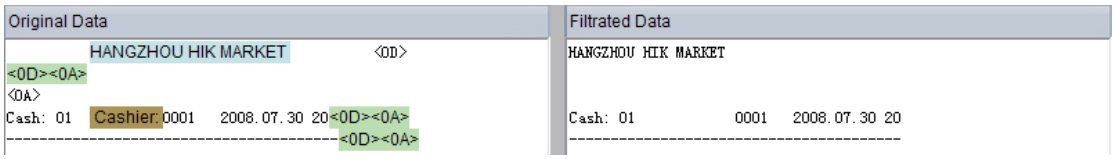
- **New Line:** The selected text for New Line rule will be treated as start of a new line. And all the contents after the new line rule will be displayed in a new line.

i.e.: Select <0D><0A> as new line rule.



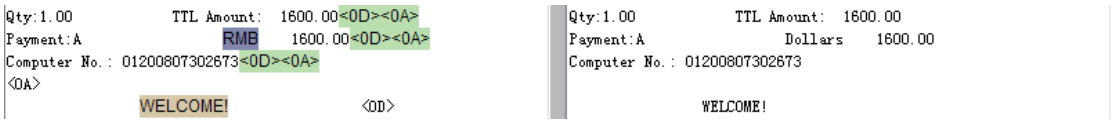
- **Ignore:** Delete the selected text from transaction data.

i.e.: ignore 'Cashier'



- **Replace:** replace the selected text with user-defined content.

i.e.: Replace 'RMB' as 'Dollars'



1. Delete POS rules: Click icon in the list to delete the POS rules
2. Click [OK] to save the rule configuration or [Cancel] to cancel rule configuration.

(2) Delete POS Rule

1. Select a POS rule from POS rule list (Figure 2-5) and click [Delete]. Click [OK] in the popup messagebox to delete this POS rule, or click [Cancel] to cancel this operation (Figure 2-7).

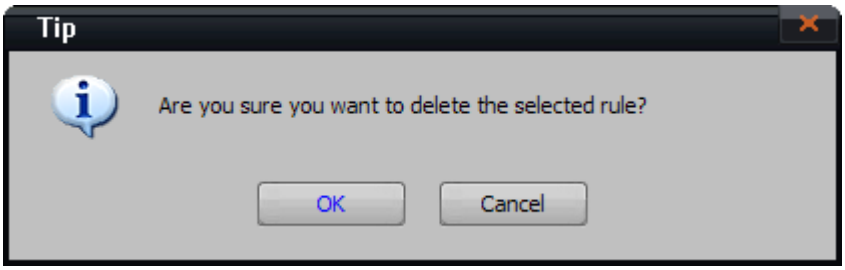


Figure 2-7 Delete POS Rule

(3) Modify POS Rule

1. Double-click a rule from POS rule list (Figure 2-5) or select a rule and click [Modify] to enter Rule

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Modification window (Figure 2-8).

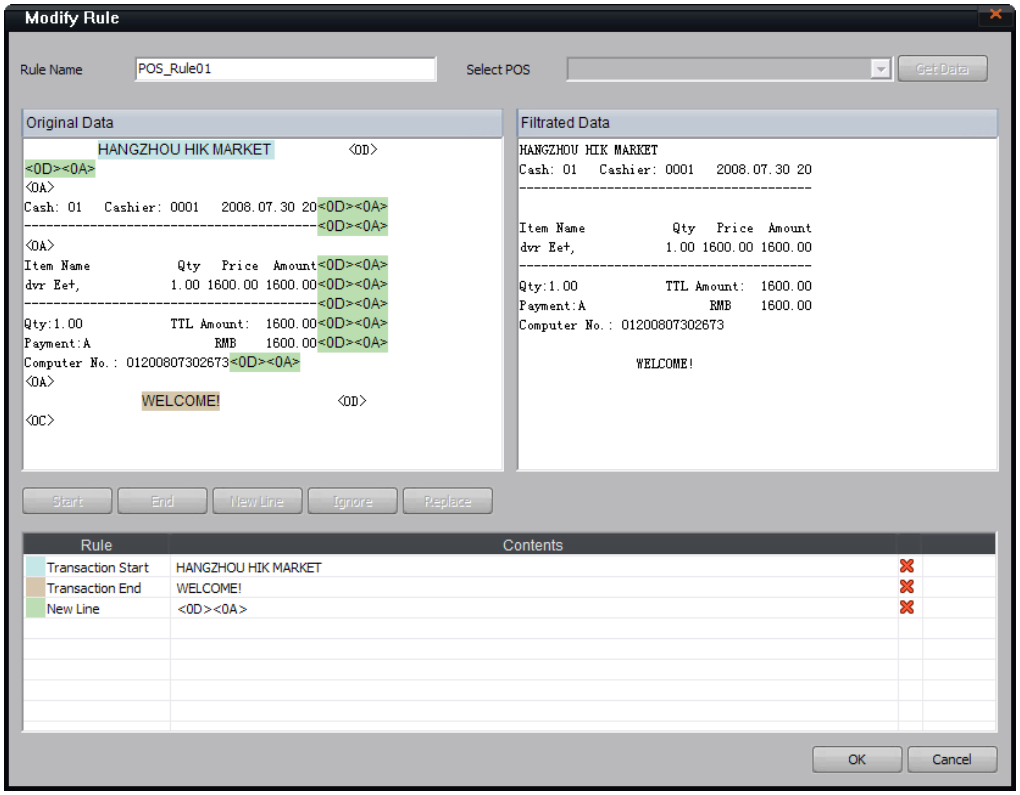

Figure 2-8 Modify POS Rule

2. POS rule modification steps are similar as Add POS Rule configuration.

(4) Import POS Rule

1. Click [Import] (Figure 6-5) to enter the POS rule import window (Figure 6-9).

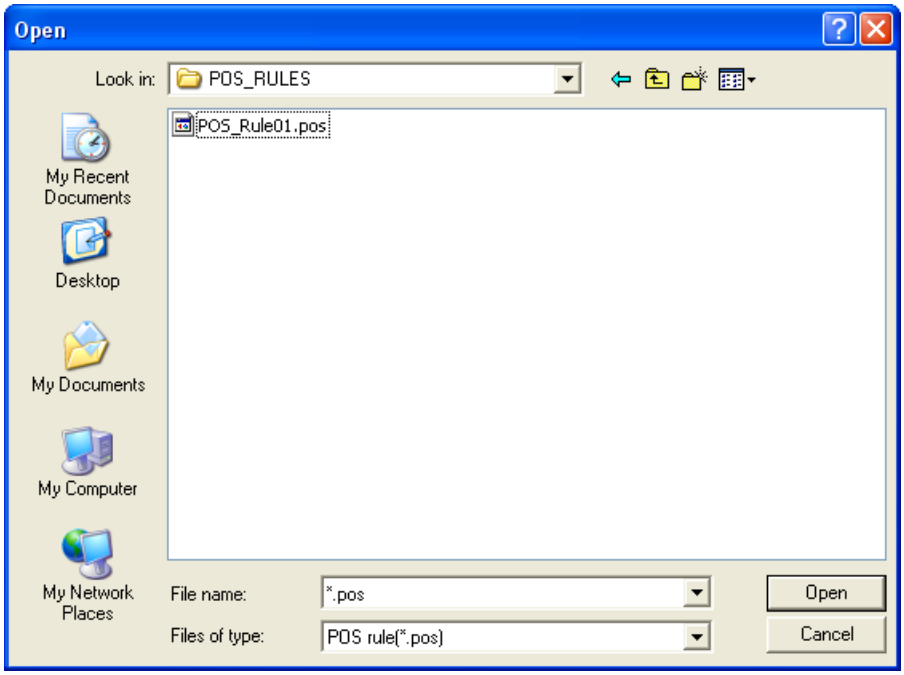

Figure 6-9 Import POS Rules

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2. Select the POS rule configuration file and click [Open] to import the file.

(5) Export POS Configuration

1. Select a POS rule from the POS rule list and click [Export] (Figure 6-5) to enter POS rule export interface (Figure 2-10).

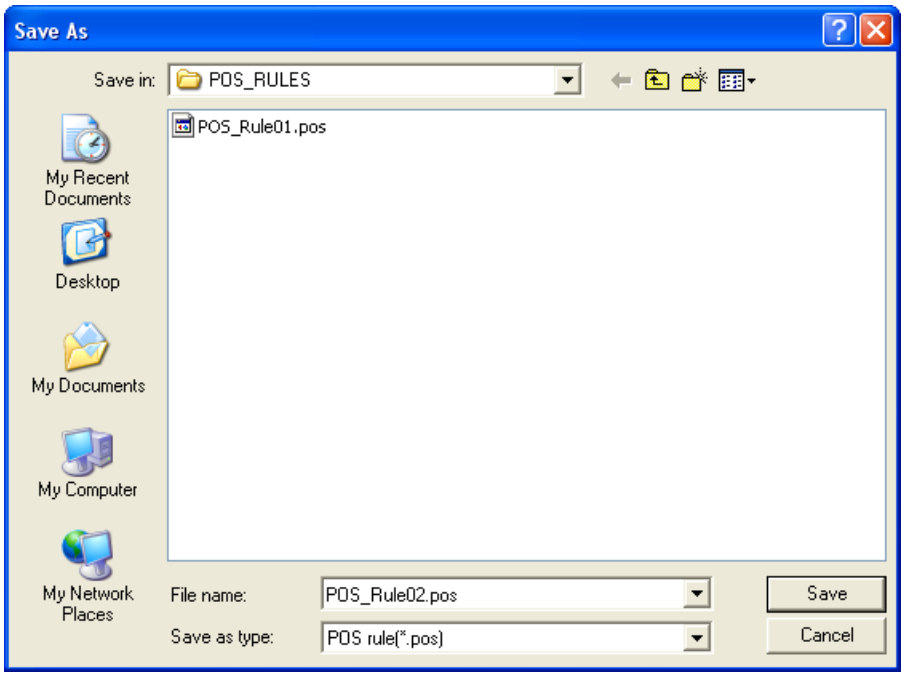

Figure 2-10 Export Rule

2. Click [Save] to export the POS rule into POS rule configuration file.

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2.3 Display Setup

Enter iVMS-2000 main interface, click [Application] and then select [POS Function] to view the POS application window. Click [Display Setup] to enter POS display setup interface (Figure 2-11).

The POS display setup includes foreground and display region settings. Foreground settings include font, font color and bold style settings; while display region settings is for configuring POS data display location on the camera image, and users can drag the rectangle and set the size and position for POS data display.

Click [Save] to save the POS display configuration, or click [Default] to restore default POS display settings.

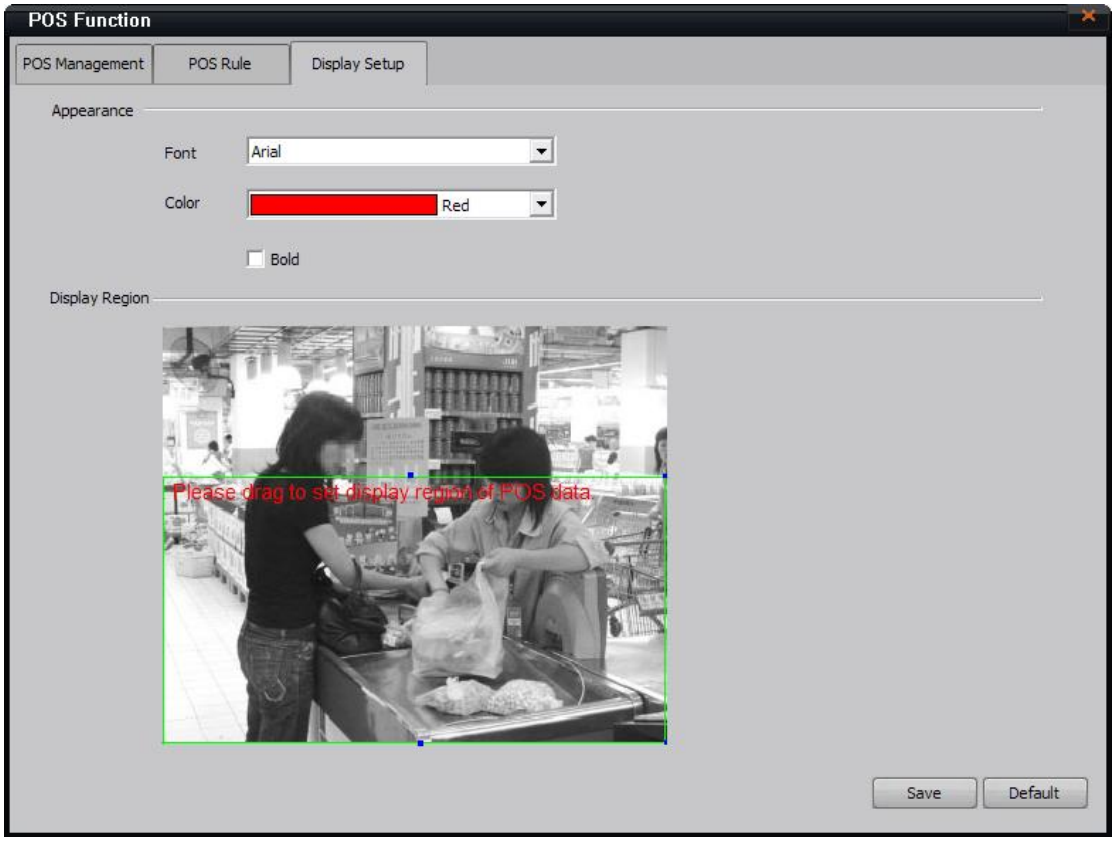

Figure 2-11 Display Settings

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